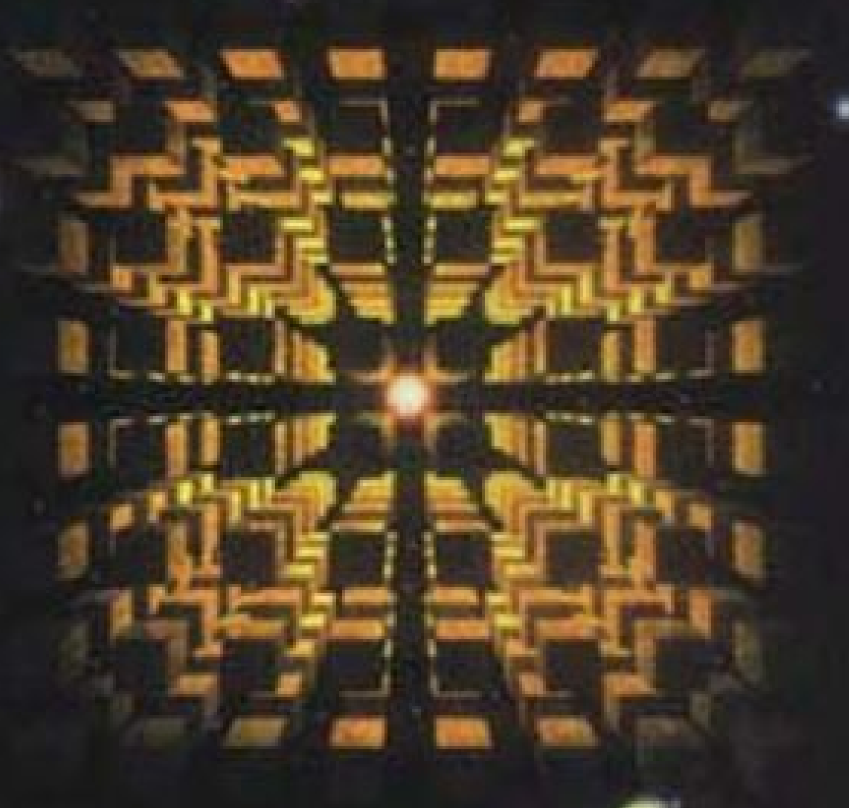
THE ILLUSTRATED

A BRIEF HISTORY OF TIME

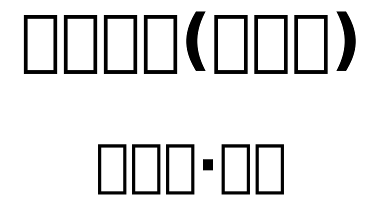
时间简史

插图本



STEPHEN HAWKING

史蒂芬·霍金／著　许明贤　吴忠超／译　湖南科学技术出版社



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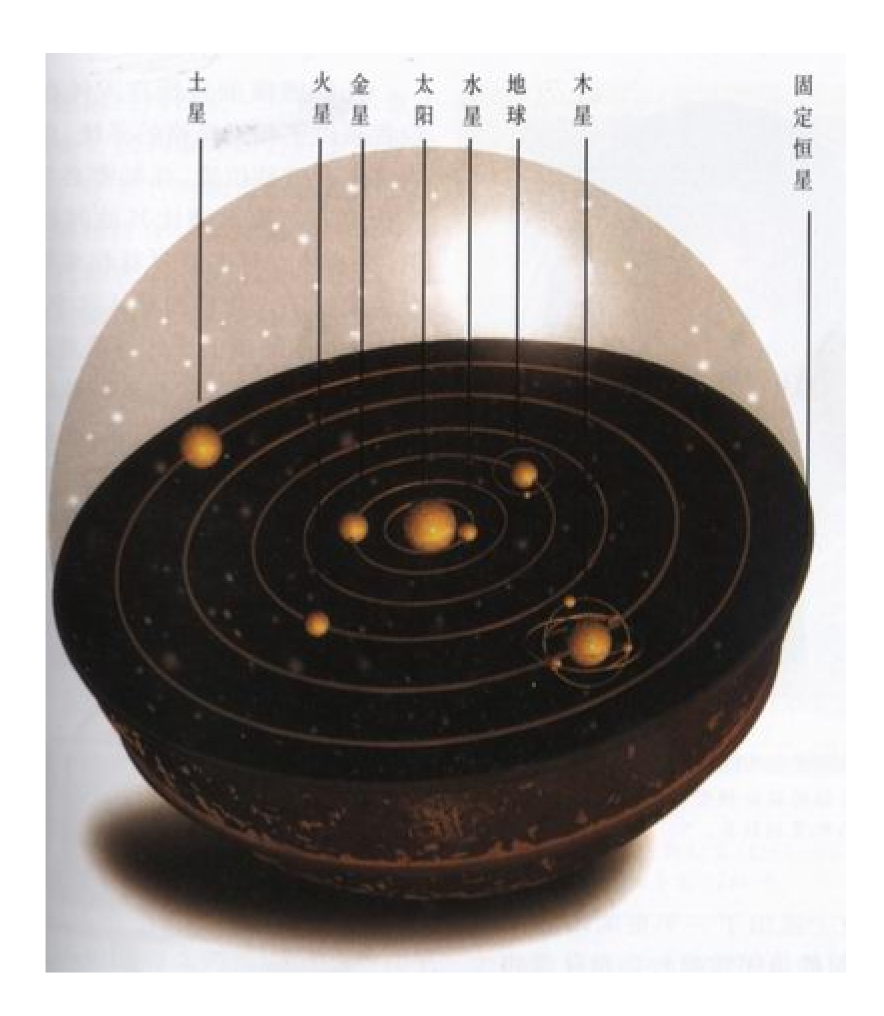
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金星
太阳
水星
地球
木星
固定恒星

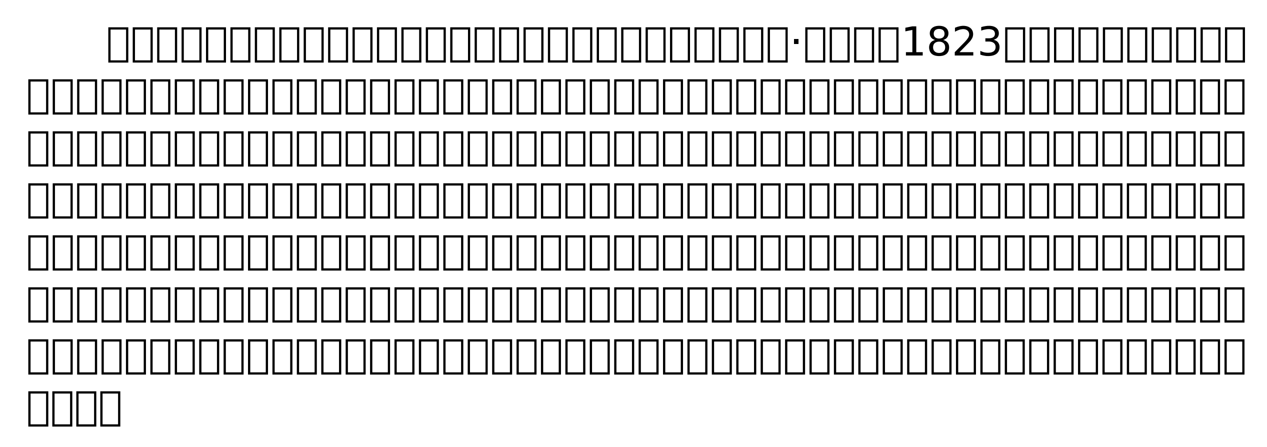
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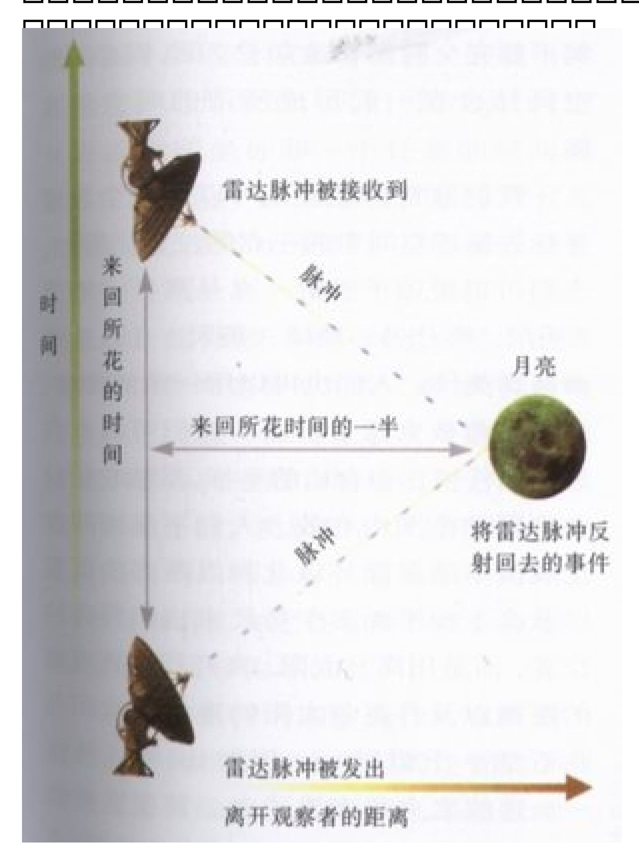
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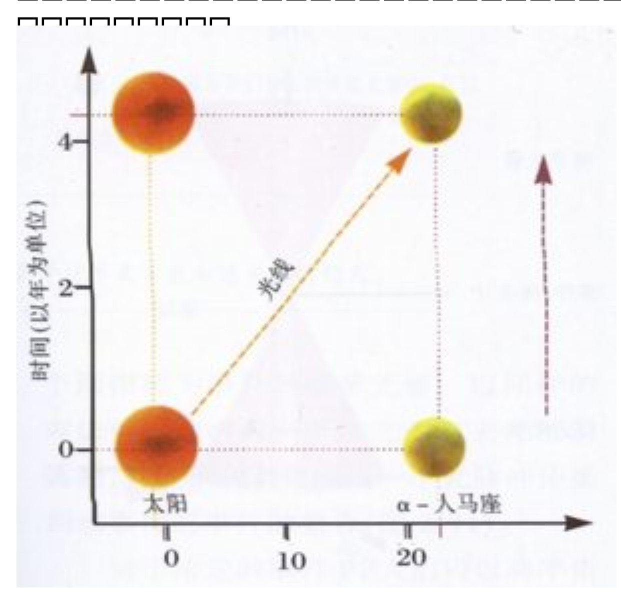
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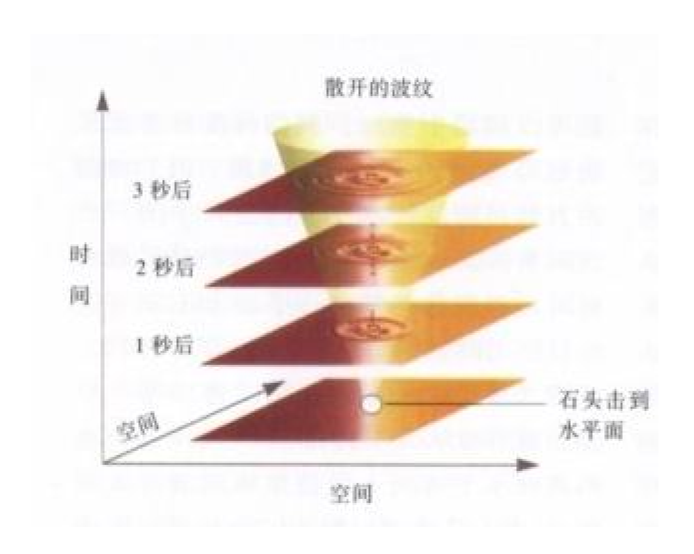
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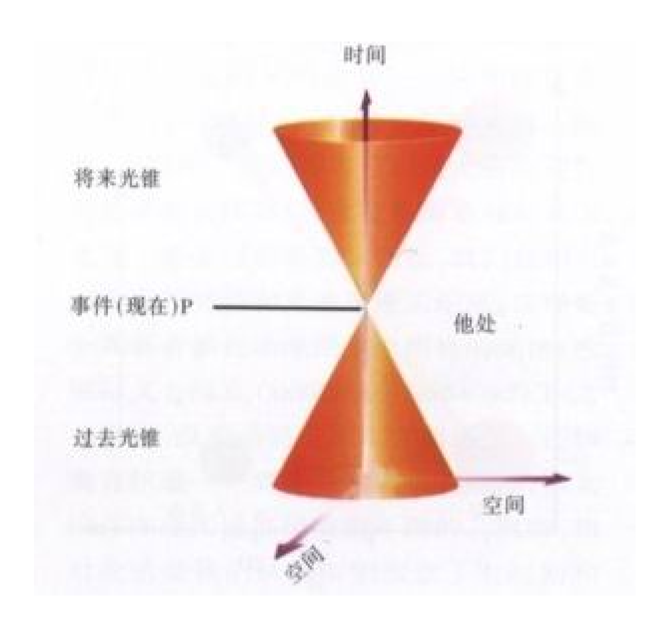
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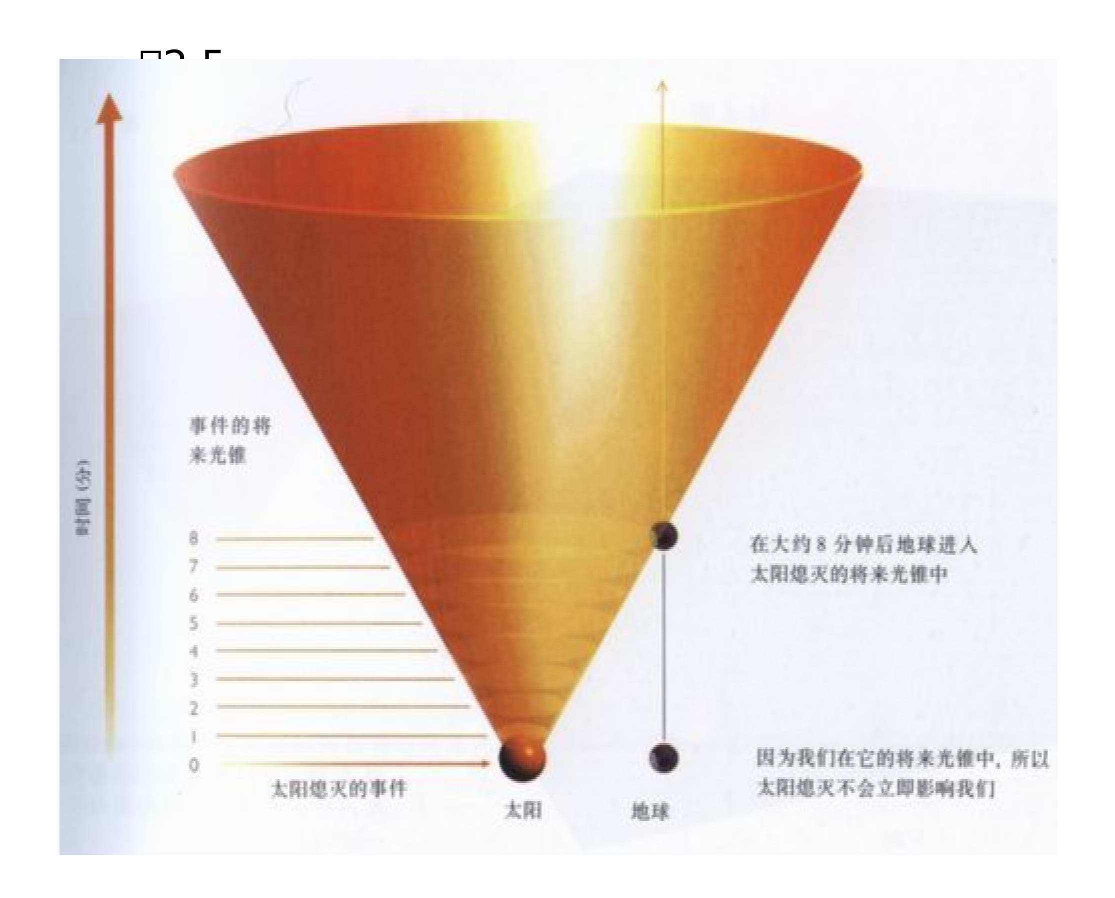
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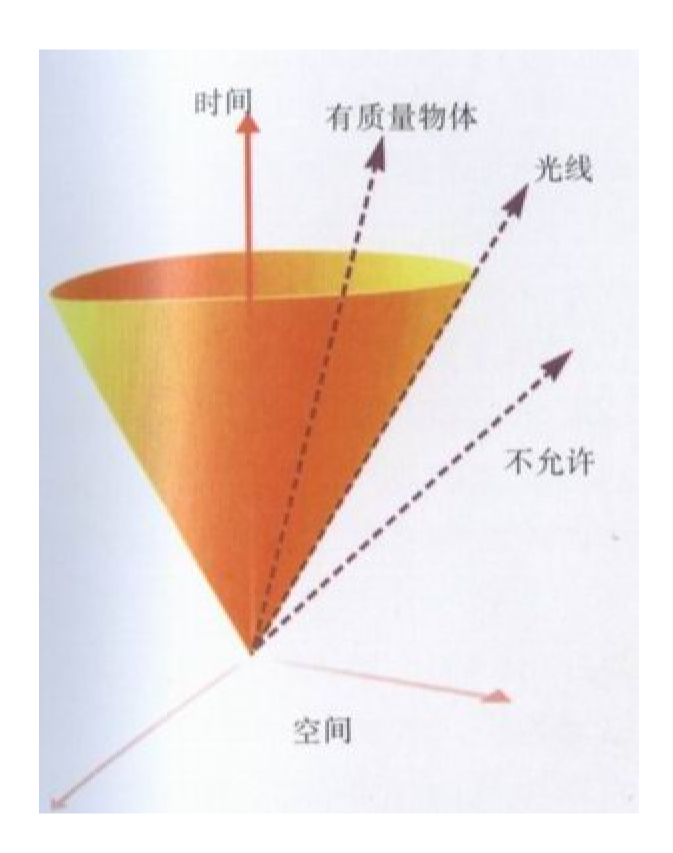


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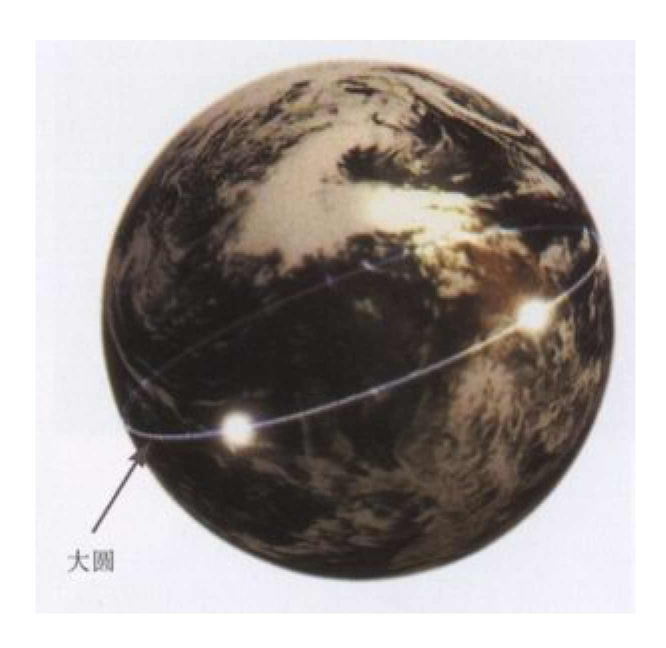

时间（分）
事件的将
来光锥
8
7
6
5
4
3
2
1
0
太阳熄灭的事件
太阳
地球
在大约 8 分钟后地球进入
太阳熄灭的将来光锥中
因为我们在它的将来光锥中，所以
太阳熄灭不会立即影响我们

[illegible]2.6

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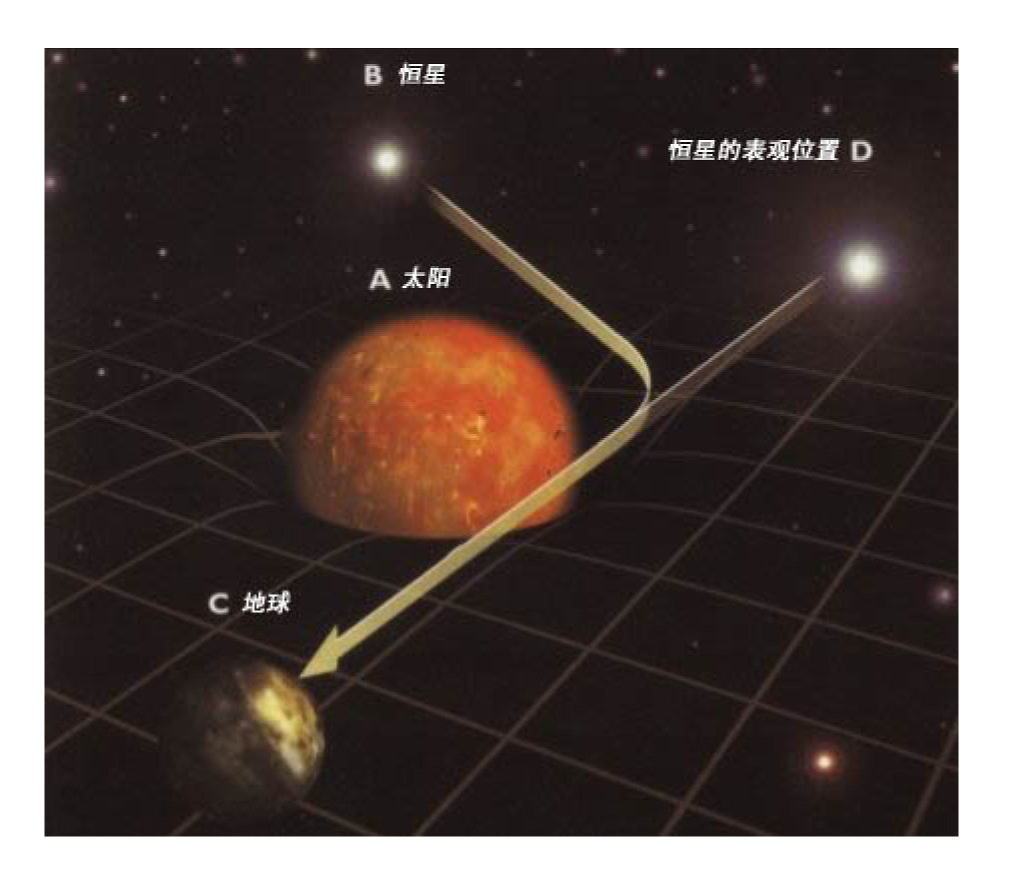
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B 恒星
恒星的表观位置 D
A 太阳
C 地球

1915





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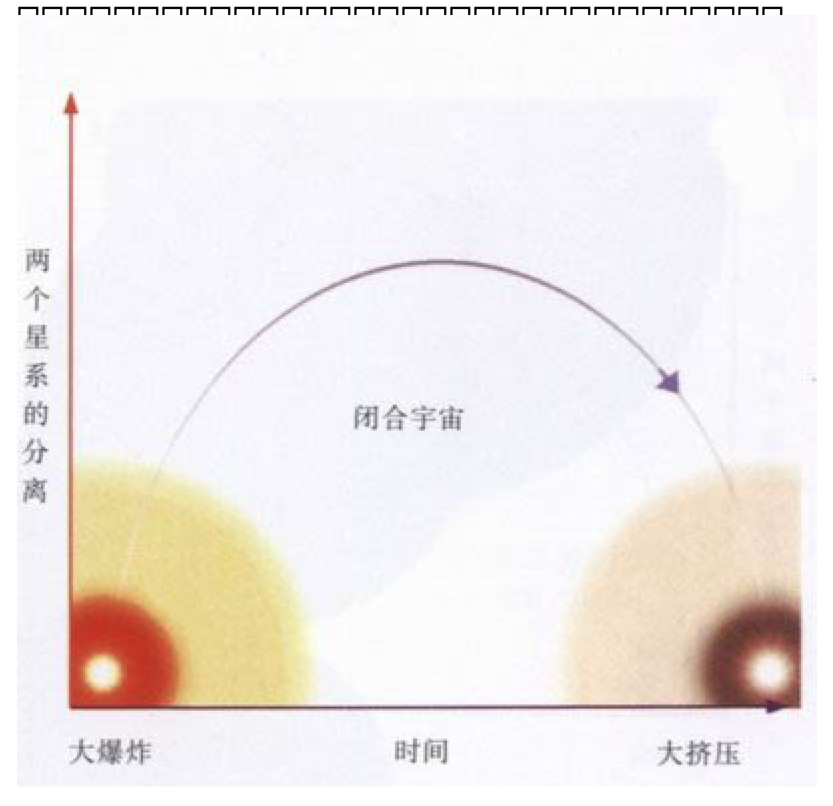
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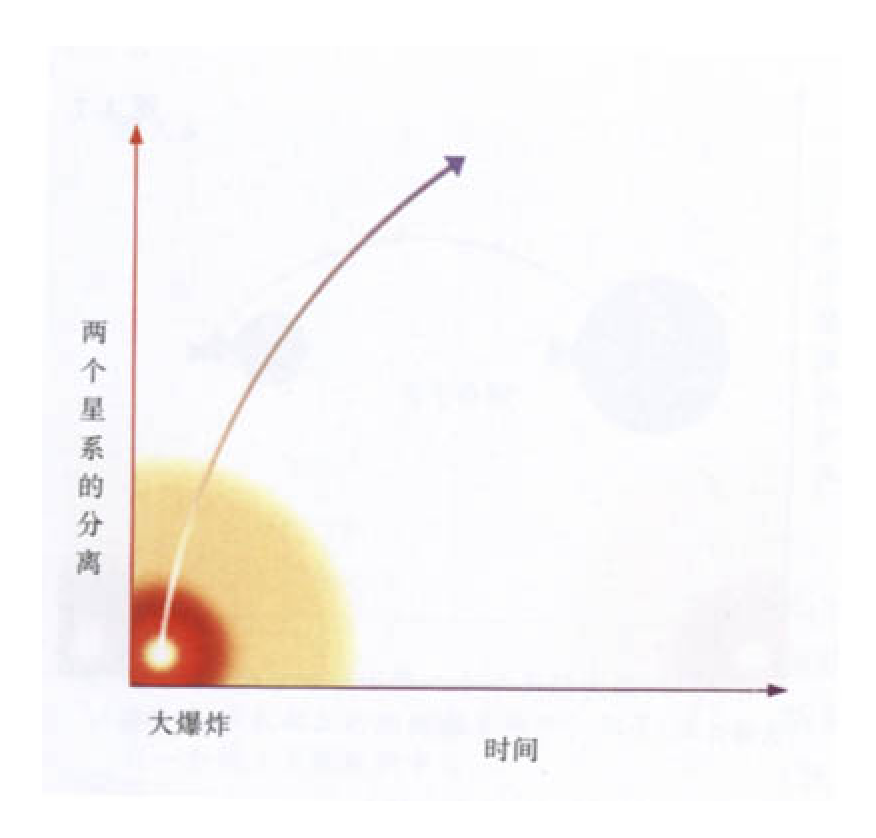
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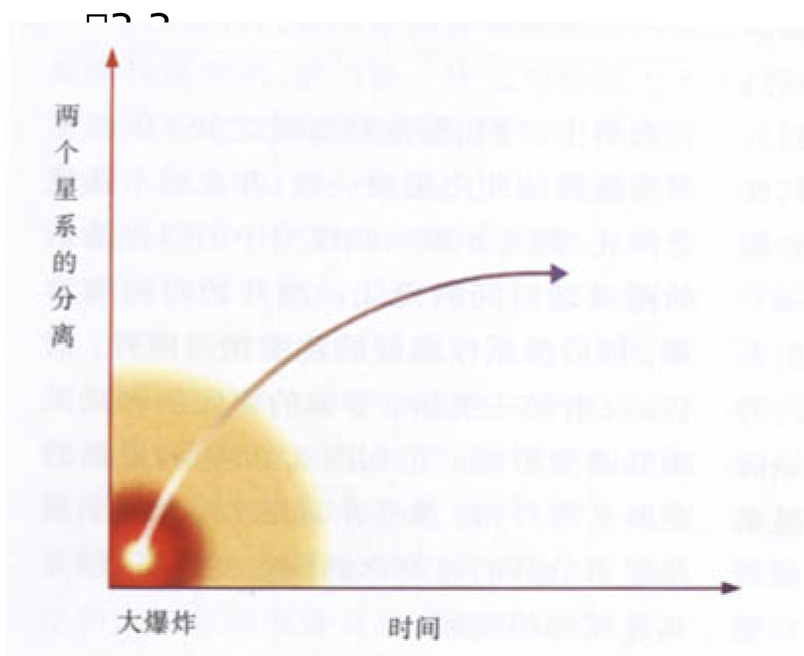
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□3.2



□3.3



□3.4

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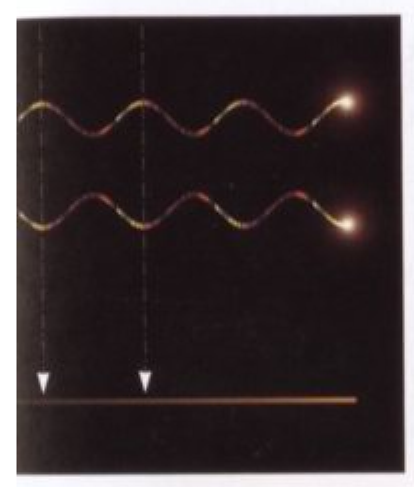
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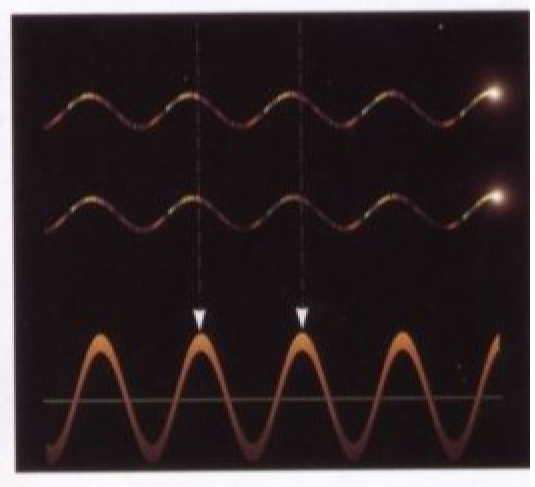
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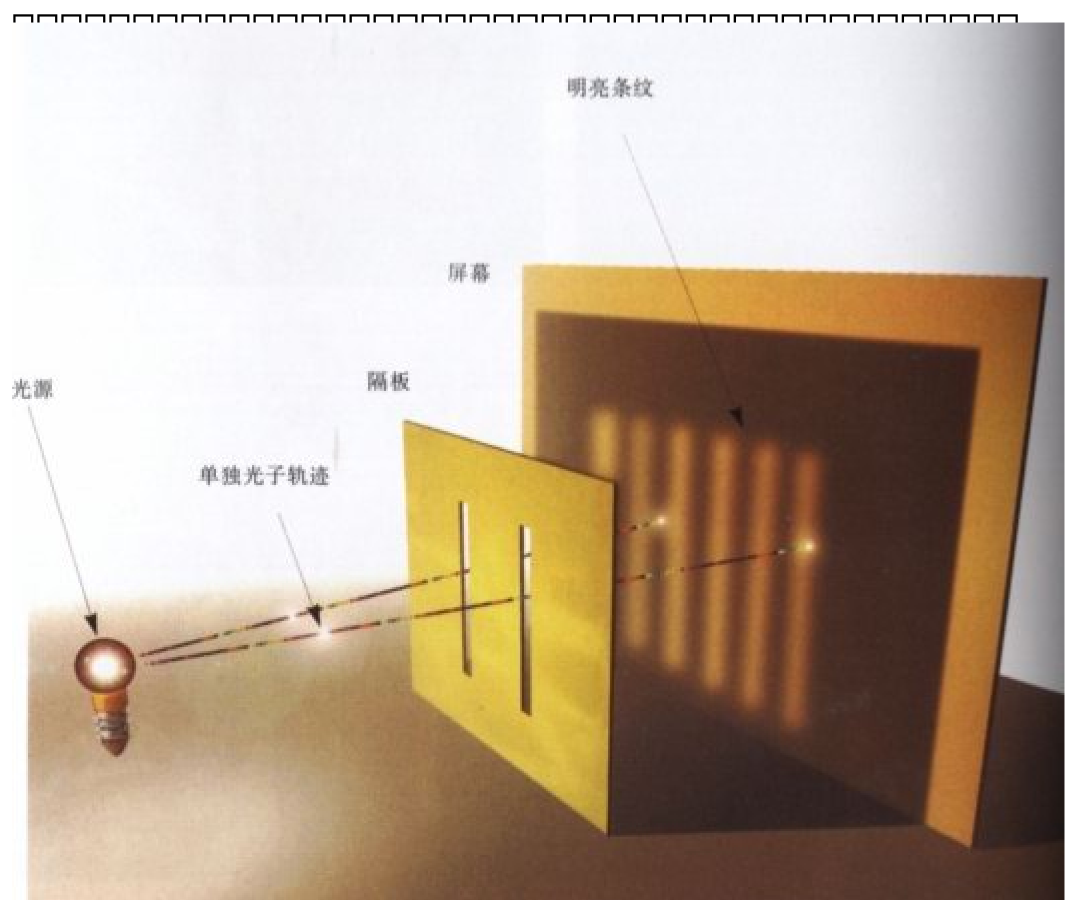
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□4.1



□4.2

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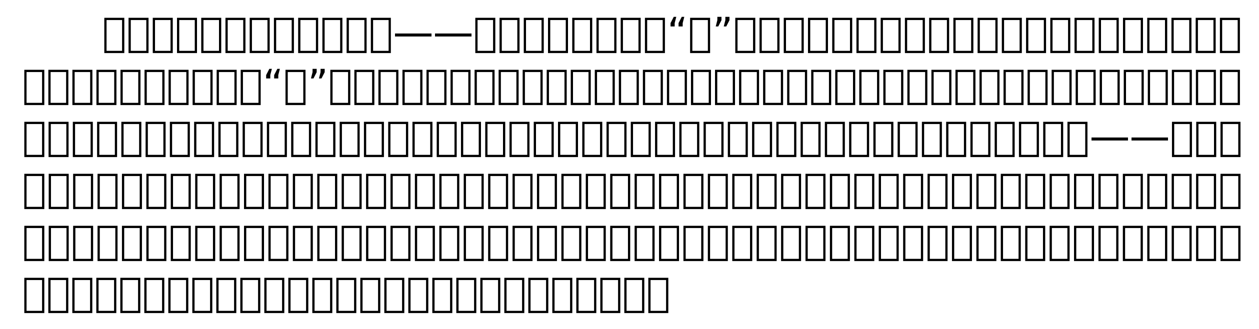
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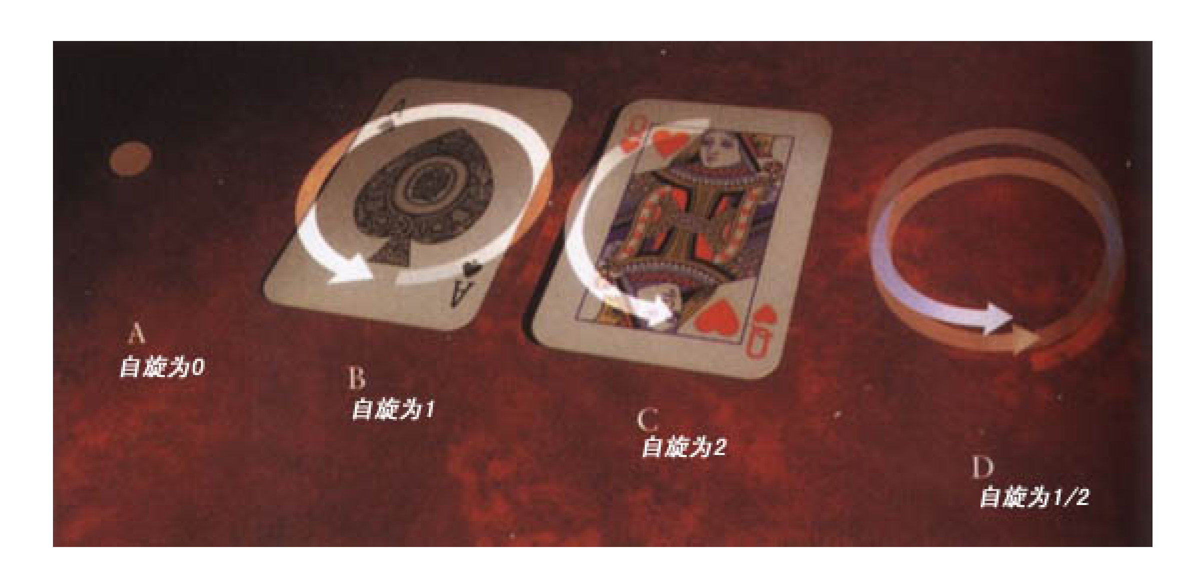
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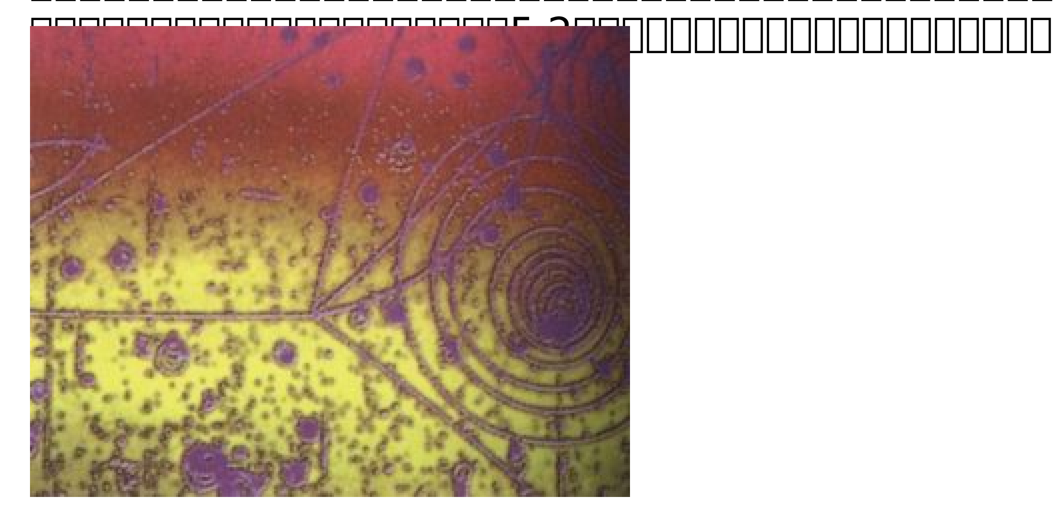
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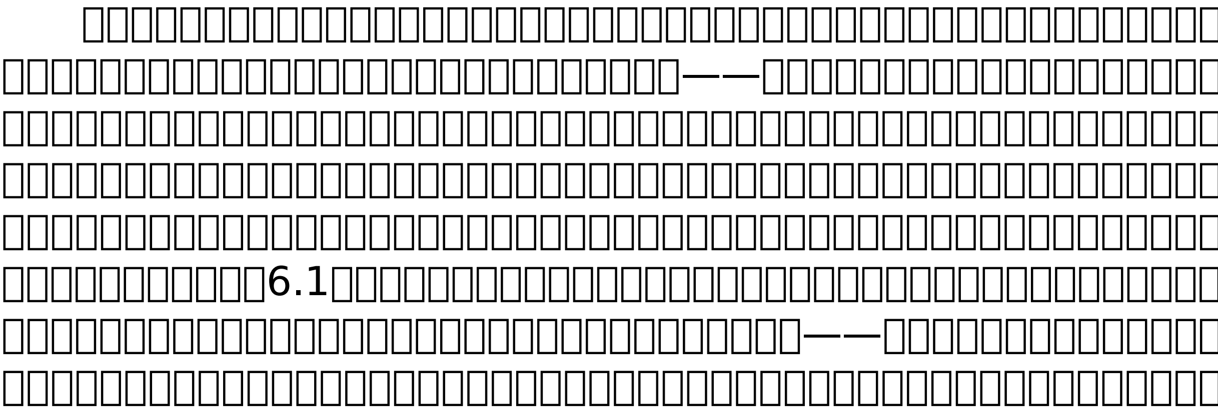
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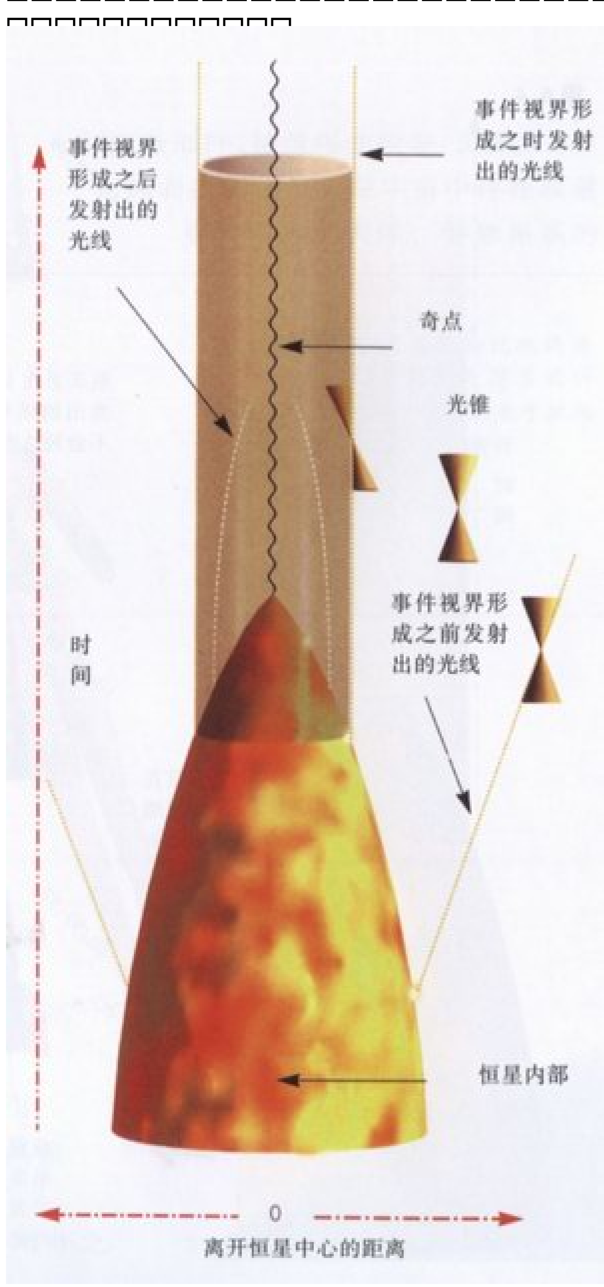
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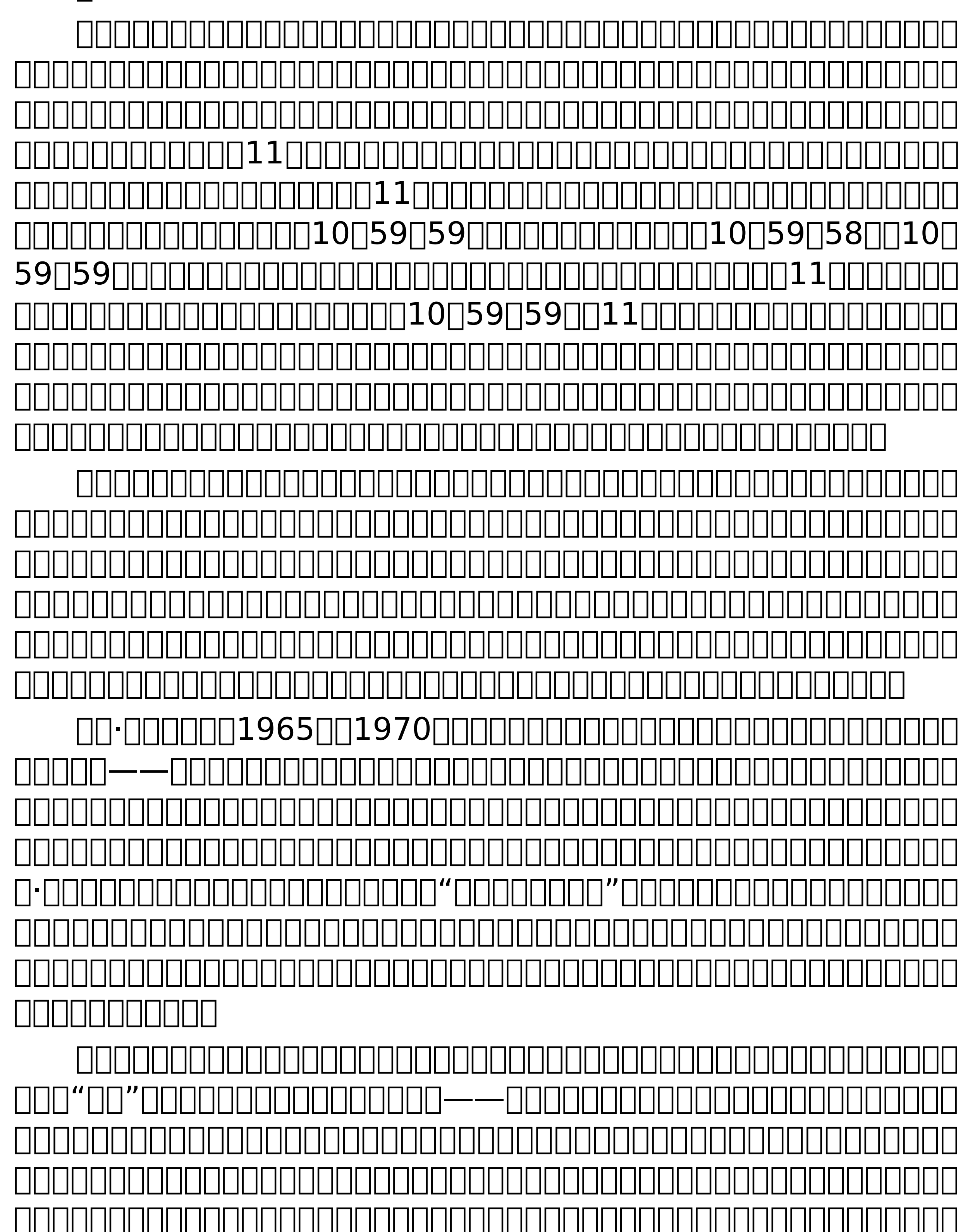
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事件视界形成之时发射出的光线
事件视界形成之后发射出的光线
奇点
光锥
事件视界形成之前发射出的光线
时间
恒星内部
0
离开恒星中心的距离



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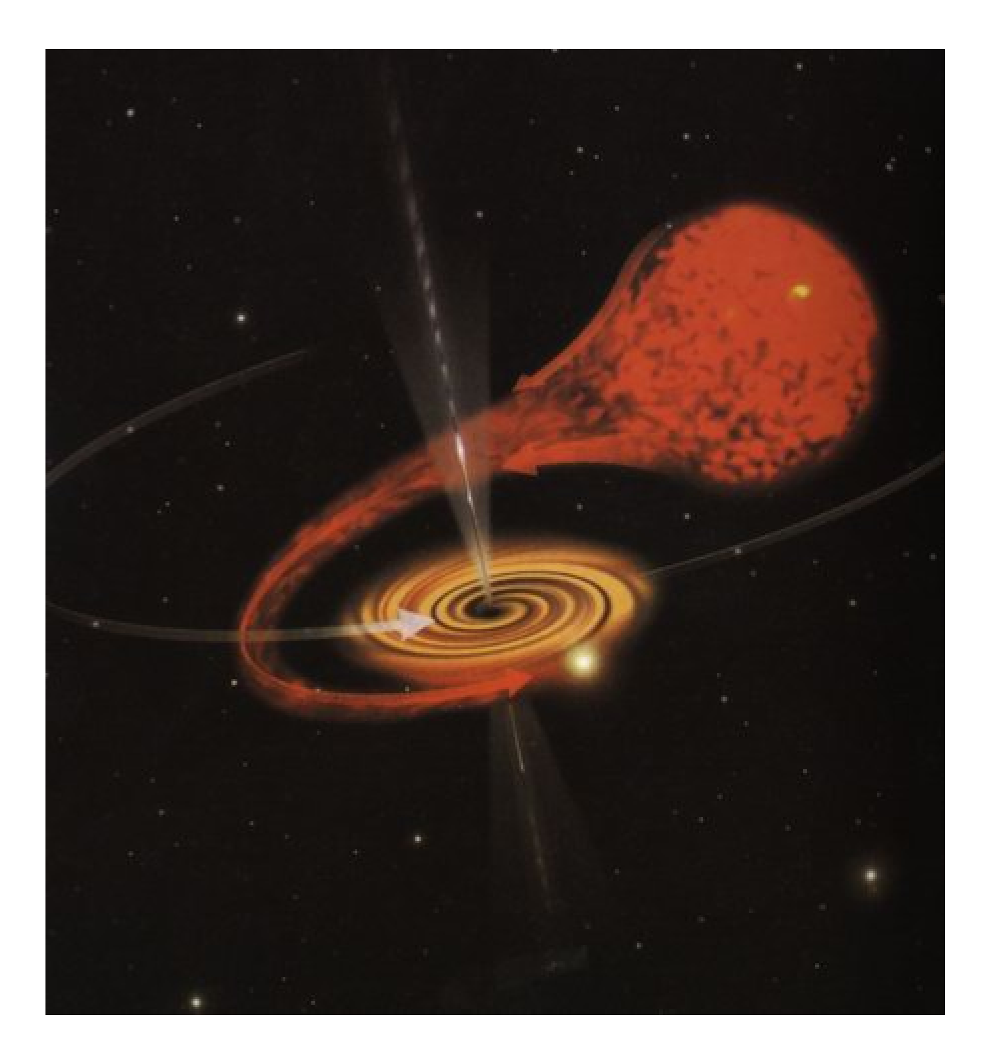
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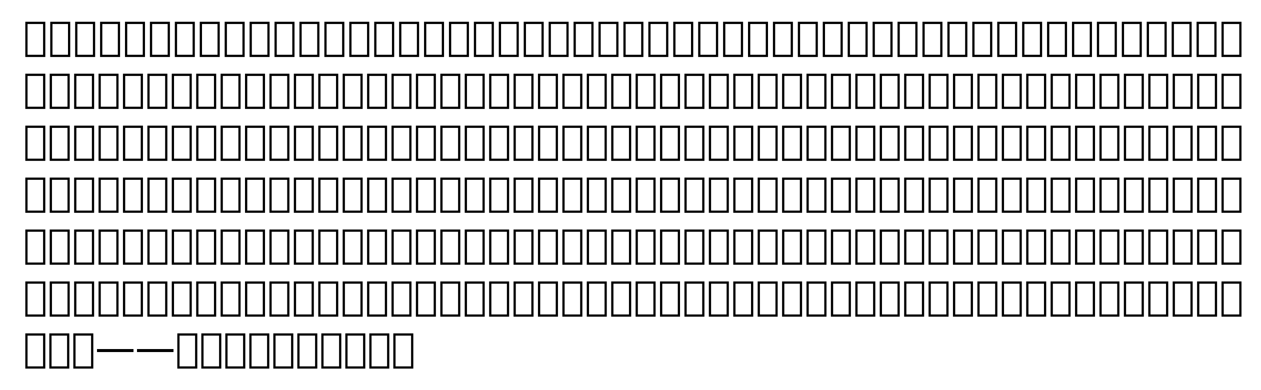
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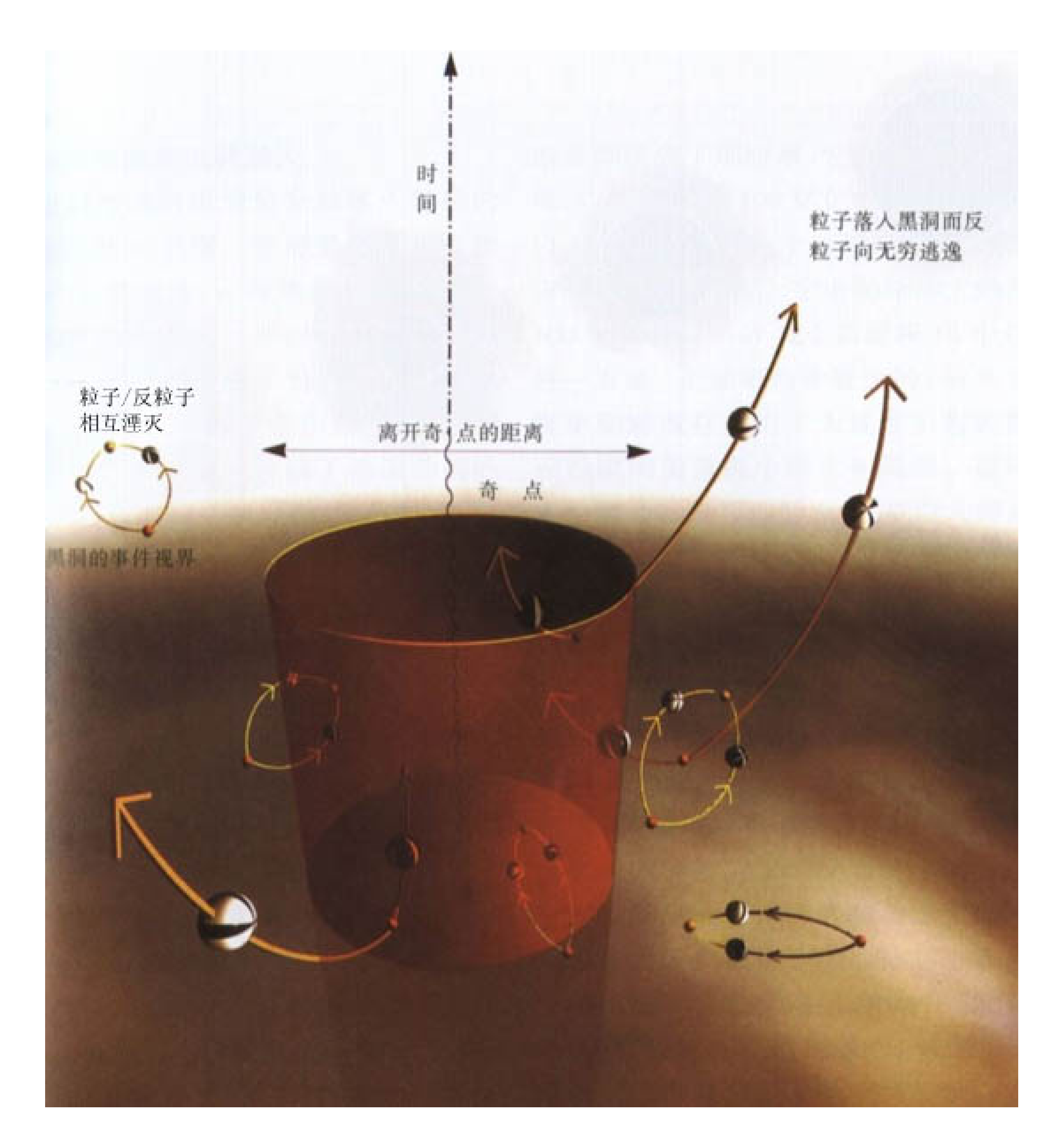
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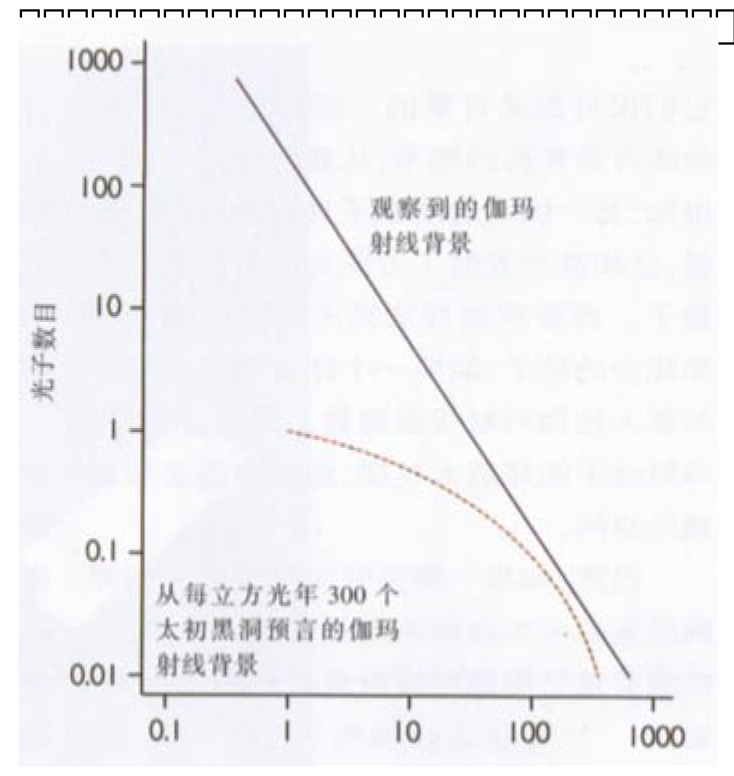


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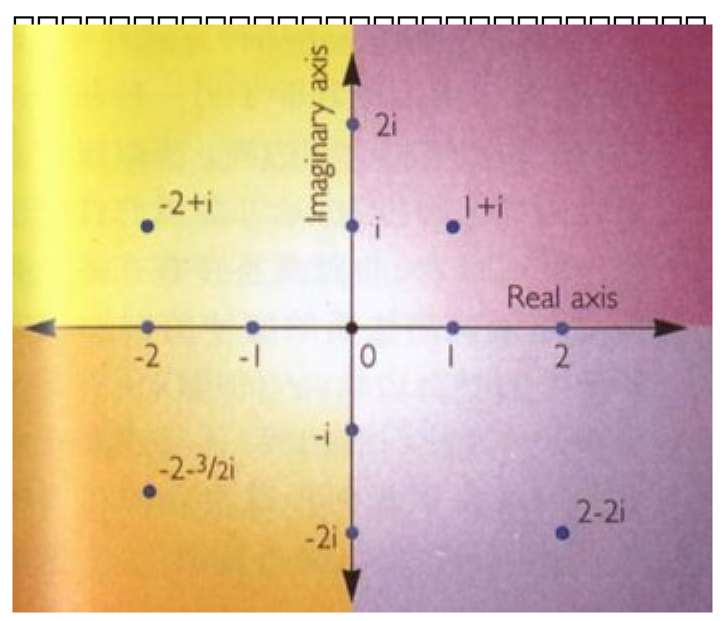
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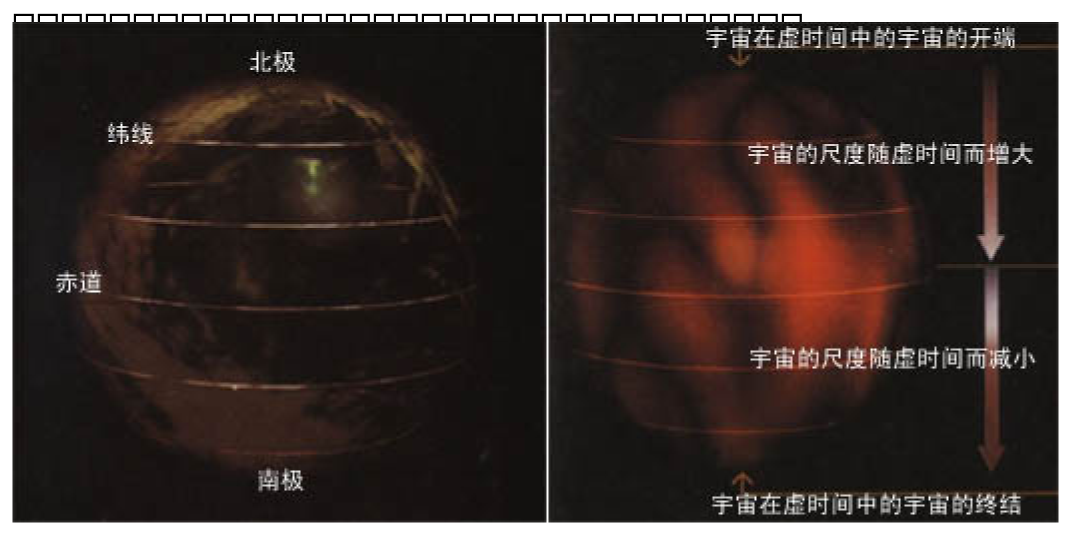
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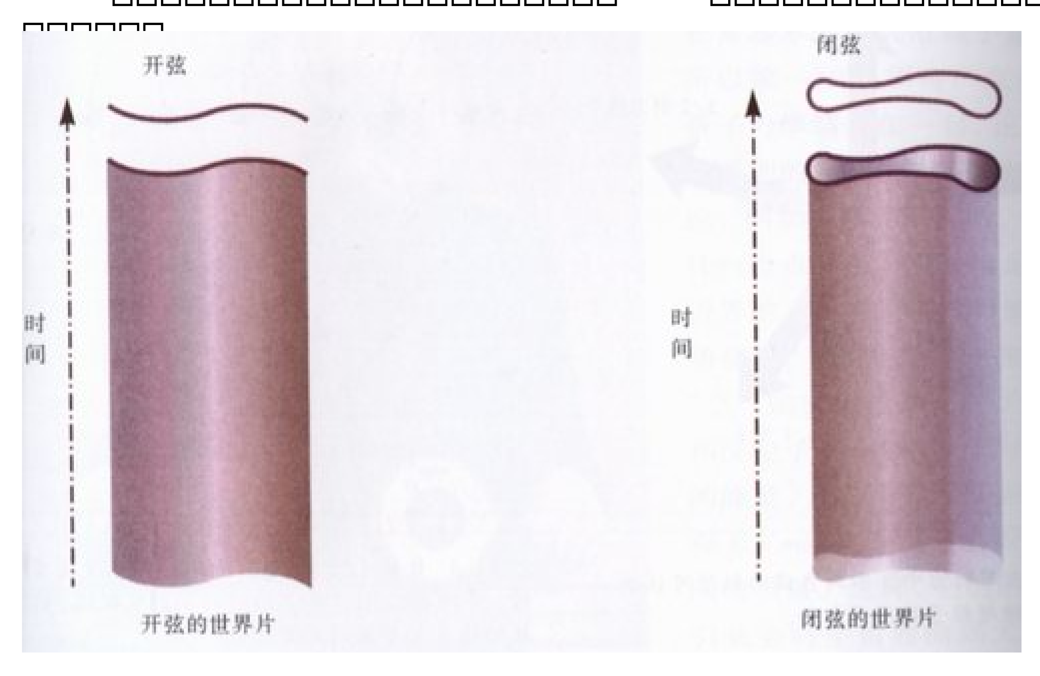
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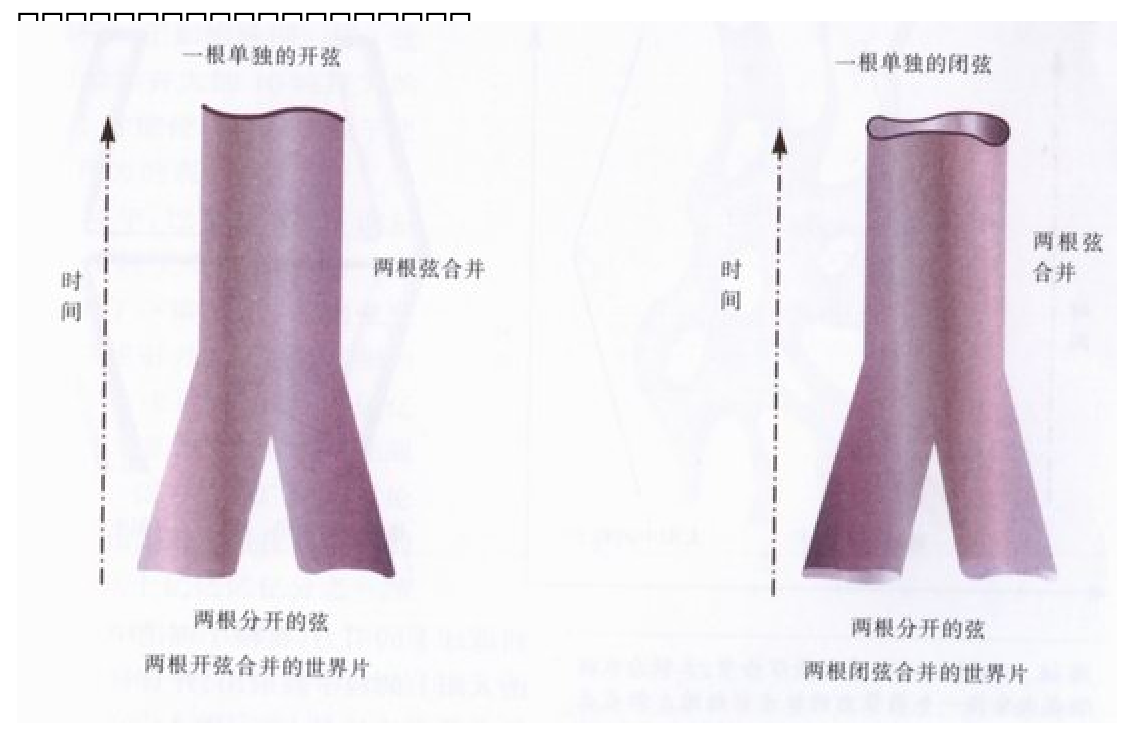
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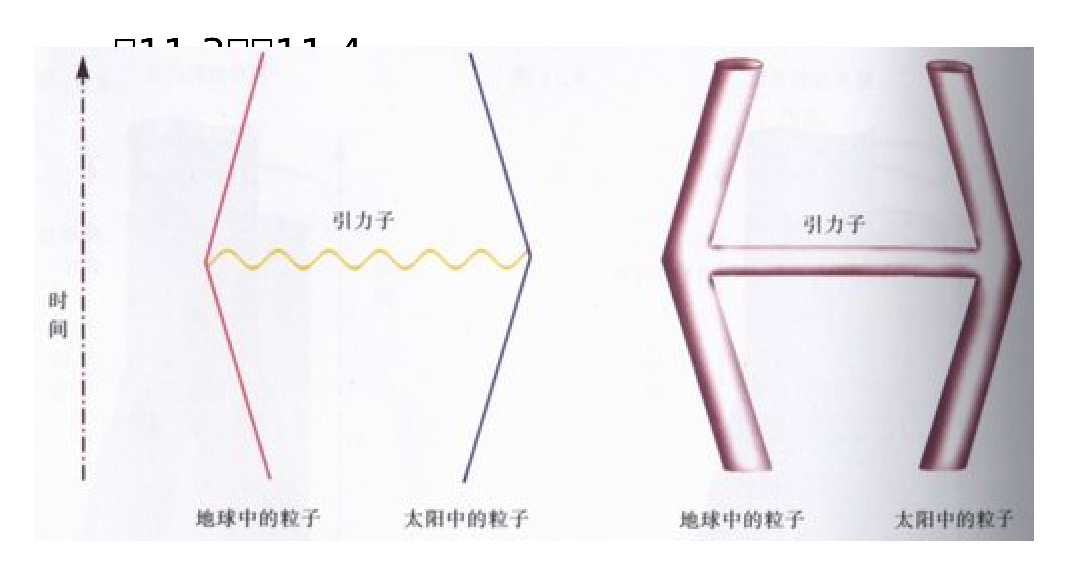

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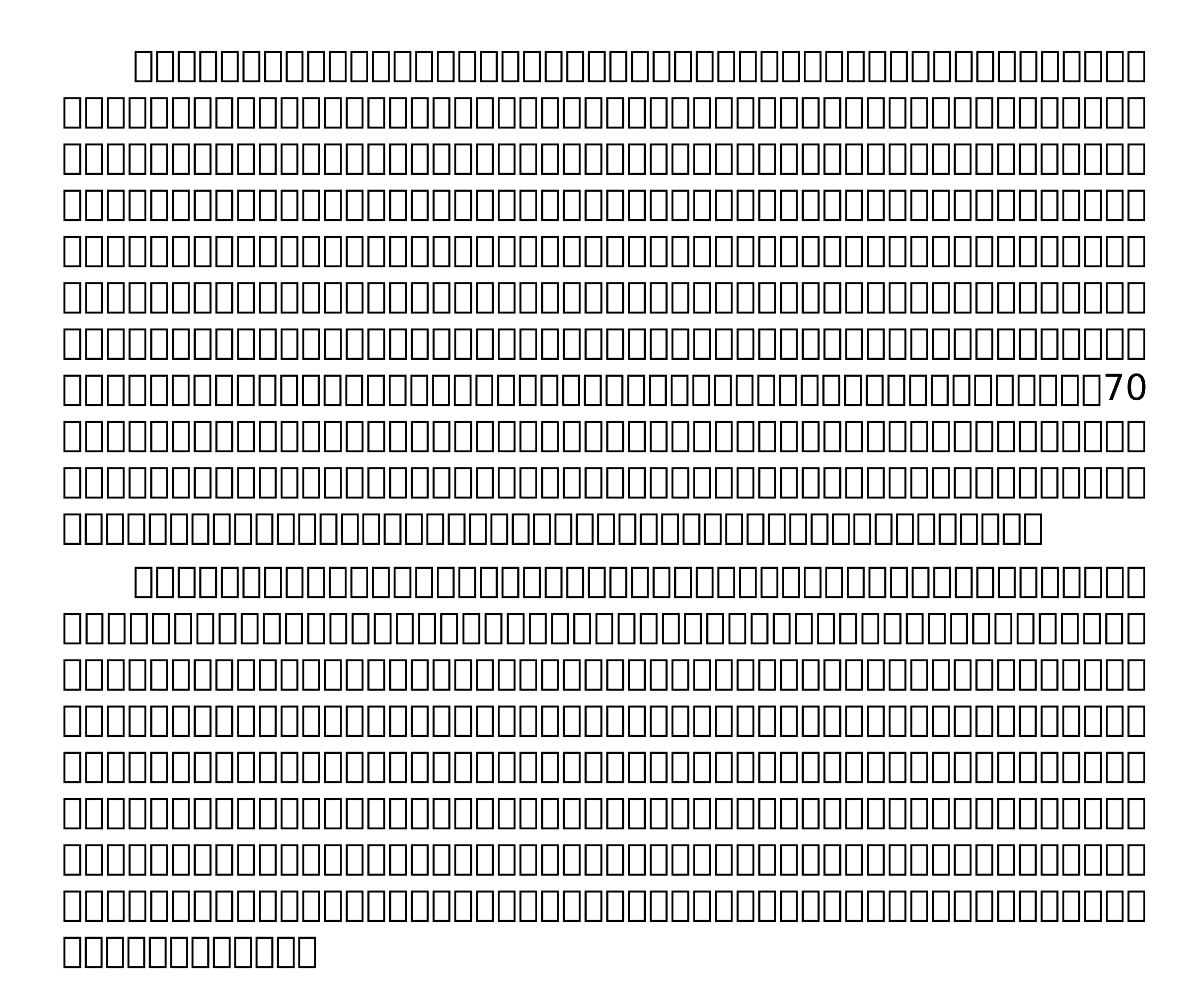
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